REMARKS

Claims 1-21 and 39-43 remain pending. Claims 11-21 stand allowed. Reconsideration and withdrawal of the rejections of claims 1-10 and 39-43 are respectfully requested in light of the following remarks.

Rejection under 35 U.S.C. 102(e)—Rhodes

Claims 1, 5-10, 39, and 41-43 stand rejected under 35 U.S.C. 102(e) as anticipated by U.S. Pat. Pub. No. 2005/0023553 to Rhodes ("Rhodes"). The rejection is traversed.

The present invention relates to a method of forming a contact in a pixel sensor cell. As embodied by claim 1, the claimed method comprises "implanting a dopant at an angle relative to sidewalls of [a slot in a passivation layer formed over a substrate] through said slot into [a] charge collection region to form a doped area in said charge collection region; and forming a contact within said slot, the contact being in electrical connection to said doped area." Put another way, the claimed invention, as recited by claim 1, requires a slot that: (a) is formed in a passivation layer in an area over a charge collection region, (b) is used for angled implantation of a dopant in the region, and (c) in which a contact to the doped area is formed. In order to anticipate the claimed invention, Rhodes must teach each of these limitations. Rhodes does not.

With reference to FIG. 7 of Rhodes, the Office Action states that the opening in passivation layer 167 meets the requirements of the claimed slot. (Office Action, at 3). Although an angled implant is deposited through this area, Rhodes specifically teaches that the passivation layer 167 is then "removed by conventional techniques." [0062]. Thus, this slot can not be the claimed slot because it is not used for creating a contact to the doped area. Thereafter, Rhodes teaches that devices such as transistors are formed on the pixel cell, which can then be covered with a second passivation layer (such as silicon dioxide) and is "etched to form contact holes." [0064] Thus, the contacts of Rhodes are formed through openings in passivation layers, but not through slots in which a dopant is

implanted at an angle to form doped areas in a substrate because this slot and passivation layer have already been removed, according to Rhodes.

For at least these reasons, Rhodes does not anticipate the claimed invention as embodied by claim 1. Claims 2-10 depend from claim 1, contain every limitation recited therein, and are also allowable for at least these reasons.

Similarly, independent claim 39 recites a method for forming a contact comprising each of the steps discussed above with respect to claim 1, and further requiring that the charge collection region is a "floating diffusion region." For all of the reasons discussed above regarding the allowability of claim 1, claim 39 is also allowable. Further, claims 40-43 each depend from claim 39 and are also allowable for at least these reasons.

Rejection under 35 U.S.C. 103(a)—Rhodes

Claims 2-4 and 40 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes. As stated in the previous Amendment Remarks, filed July, 14, 2005, **Rhodes is not a proper 103(a) reference** because Rhodes qualifies as prior art only under subsection (e) of Section 102, and because "the subject matter [of Rhodes] and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person." 35 U.S.C. 103(c). As previously stated, both the present invention and the Rhodes disclosure were under an obligation to assign to Micron Technology, Inc. at the time of invention, as evidenced by the assignments submitted to the Patent Office in connection with each respective application. A copy of the Patent Office's assignment records for these applications is included herewith. Accordingly, withdrawal of the rejection is respectfully requested.

In view of the above, applicant believes the pending application is in condition for allowance. Favorable action on claims 1-21 and 39-43 is solicited.

Dated: November 4, 2005

Respectfully submitted,

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Total Assignments: 1

Patent #: 6900484 **Issue Dt:** 05/31/2005 **Application #:** 10629679 **Filing Dt:** 07/30/200

Publication #: US20050023553 **Pub Dt:** 02/03/2005

Inventor: Howard E. Rhodes

Title: ANGLED PINNED PHOTODIODE FOR HIGH QUANTUM EFFICIENCY

Assignment: 1

Reel/Frame: 014362/0224 **Recorded:** 07/30/2003 **Pages:** 5

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignor: RHODES, HOWARD E. **Exec Dt:** 06/17/2003

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Total Assignments: 1

Patent #: NONE **Issue Dt:** **Application #:** 10786299 **Filing Dt:** 02/26/200

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Inventor: Brent A. McClure

Title: METHOD OF FORMING A CONTACT IN A PIXEL CELL

Assignment: 1

Reel/Frame: 015025/0949 **Recorded:** 02/26/2004 **Pages:** 3

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

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